



# Medical Therapeutics

<b>Primary Career Cluster:</b>	Health Science
<b>Program Manager:</b>	Sloan Hudson, (615) 532-2839, <a href="mailto:sloan.hudson@tn.gov">sloan.hudson@tn.gov</a>
<b>Course Code(s):</b>	5999
<b>Prerequisite(s):</b>	<i>Health Science Education (5998)</i>
<b>Credit:</b>	1
<b>Grade Level:</b>	10-11
<b>Graduation Requirements:</b>	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Health Science courses.
<b>Programs of Study and Sequence:</b>	This is the second or third course in the <i>Nursing Services</i> and <i>Therapeutic Services</i> programs of study.
<b>Aligned Student Organization(s):</b>	HOSA: <a href="http://www.tennesseehosa.org">http://www.tennesseehosa.org</a> Pamela Sieffert, (615) 532-6270, <a href="mailto:Pamela.Sieffert@tn.gov">Pamela.Sieffert@tn.gov</a>
<b>Coordinating Work-Based Learning:</b>	Teachers are encouraged to use embedded WBL activities such as informational interviewing, job shadowing, and career mentoring. For information, visit <a href="https://www.tn.gov/education/career-and-technical-education/work-based-learning.html">https://www.tn.gov/education/career-and-technical-education/work-based-learning.html</a> .
<b>Available Student Industry Certifications:</b>	None
<b>Dual Credit or Dual Enrollment Opportunities:</b>	There are no known dual credit/dual enrollment opportunities for this course. If interested in developing, reach out to a local postsecondary institution to establish an articulation agreement.
<b>Teacher Endorsement(s):</b>	577, 720
<b>Required Teacher Certifications/Training:</b>	None
<b>Teacher Resources:</b>	<a href="https://www.tn.gov/content/dam/tn/education/ccte/cte/cte_resource_health_science.pdf">https://www.tn.gov/content/dam/tn/education/ccte/cte/cte_resource_health_science.pdf</a>

## Course Description

*Medical Therapeutics* is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments.

## Program of Study Application

This is the second or third course in the *Nursing Services* and *Therapeutic Services* programs of study. For more information on the benefits and requirements of implementing these programs in full, please visit the Health Science website at <https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-health-science.html>

### Implementation options are as follows:

- Option 1: Medical Therapeutics taught as Level Two course
- Option 2: Medical Therapeutics taught as Level Three course

### Core standards are required for both options above:

1,2,3,4,5,6,7,8,9,10,13,14,15,16,17

### Additional standards:

Option 1: 11

Option 2: 12

## Course Standards

### Therapeutic Careers

- 1) Differentiate career pathways within the Therapeutics cluster. Using supporting evidence from multiple sources, such as local job postings, O\*NET OnLine, and Tennessee Department of Labor and Workforce Development data, describe the scope of practice and the essential knowledge and skills required for these careers. Complete one or more career aptitude surveys, analyze the results, and relate in an essay how personal career aptitudes align with careers in therapeutics.
- 2) Analyze specific laws and ethical issues that impact professional practice such as confidentiality, informed consent, and patient self-determination. Citing specific textual evidence to support analysis, debate these issues in an oral or written format.
- 3) Differentiate between the common members of the patient care team summarizing the individual roles and the interrelatedness of the team members as it relates to quality patient care. Prepare an informative artifact to explain the concept of team-based care to a patient.

### Health Care Communication

- 4) Evaluate factors that contribute to effective communication and explain how these factors contribute to the development of quality patient care. Using role-play, demonstrate practices to effectively manage communication barriers, cultural differences and clients with special needs.

- 5) Differentiate between verbal and nonverbal communication when interacting with patients. Examine specific techniques for effective communication and evaluate how different cultures attach different meanings to communication techniques.

### **Facility Guidelines for Practice**

- 6) Compare the advantages and disadvantages of Electronic Health Records (EHR). Anticipate barriers and challenges associated with the large-scale move to EHR in healthcare institutions.
- 7) Explain in a written, oral, or digital format the differences in privacy of individually identifiable health information, protected health information (PHI), and security rule. Review case studies to identify violations, preventive measures, and penalties that might be levied for violations.
- 8) Relate the use of collected data by hospital information systems to the use of collected data in quality improvement initiatives. Determine how data related to sex, race and ethnicity is used to reduce disparities in different types of care such as cardiac care or cancer treatment.
- 9) Examine policies and procedures related to therapeutic equipment safety, quality control monitoring, and evaluation. Synthesize information into a digital or written presentation to instruct appropriate staff on the importance of safety practices and the implementation of quality control processes according to policy.

### **Patient Assessment and Treatment**

- 10) Demonstrate an understanding of basic medical terminology in order to monitor patient/client status through:
  - a. History and Physical including but not limited to: family, environmental, social, and mental history
  - b. Brief Head to Toe Assessment noting normal vs. abnormal findings
  - c. Vital Signs Assessment (VS)
  - d. Height/weight, BMI /Calculation
  - e. Specimen Collection
- 11) Outline the gross normal structure and function of all body systems and summarize appropriate medical text(s) in order to relate signs and symptoms of common diseases and disorders associated with each.
  - a. integumentary and lymphatic systems
  - b. nervous and musculoskeletal systems
  - c. cardiovascular and respiratory systems
  - d. digestive and urinary systems
  - e. reproductive and endocrine systems
- 12) Relate a therapeutic procedure/treatment to a specific body system. Create a digital or written artifact explaining anatomy involved with the treatment, reason for treatment, health care professionals assisting or performing treatment and patient education, including precautions that should occur prior to the treatment or procedure.

## **Fundamentals of Patient Care**

- 13) Demonstrate concepts and skills of the following in a clinical/lab setting:
  - a. Patient Positioning
  - b. Transfers and Ambulation (including injury prevention and body mechanics)
  - c. O2 Assessment and Administration (including fire safety)
  - d. BLS (Basic Life Support)

## **Fundamentals of Wellness and Disease Prevention**

- 14) Demonstrate mastery of concepts and skills related to asepsis, Universal Precautions, sanitation, disinfection, and sterilization for patient/client care settings citing the rationale for each concept/skill using standards and guidelines from the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA) in a lab/clinical setting.
- 15) Correlate the function of normal flora with homeostasis and relate deviation to disease states. Evaluate specific measures to prevent deviation that are aligned with accepted standards of care.
- 16) Assess the differences between healthcare-associated infections and non-healthcare-associated infections using examples drawn from mock patient documents or case studies. Support explanations with relevant surveillance statistics, preventive measures, and methodologies concerning outbreak detection, management, and education.
- 17) Develop a patient health education plan including health screenings, preventive measures, signs and symptoms of exacerbation of disease/disorder/injury, pharmacological needs, and support systems. Include citations from at least three medical texts.

### **The following artifacts should be included in the student's portfolio:**

- Career exploration artifacts
- Skills performance rubrics
- Documentation of job shadowing hours
- Examples of written, oral, or digital presentations

## **Standards Alignment Notes**

\*References to other standards include:

- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
  - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.